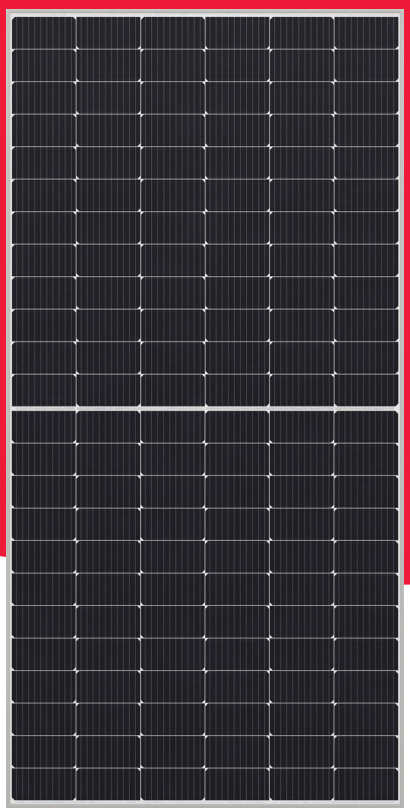
NU-JD Series

NU-JD545 / 550

545 / 550 W

The Project Solution

GOLD | Top 5%
ecovadis
Sustainability Rating
OCT 2024



Powerful product features

+% Guaranteed positive power tolerance (0/+5 %)

Module efficiency 21.1 / 21.3 %
PERC monocrystalline silicon photovoltaic modules

Max. system voltage 1,500 V
Lower BOS costs by longer strings

MBB busbar technology
Improved reliability
Higher efficiency
Reduced series resistance

Half-cut cell
Improved shading performance
Lower internal losses

Tested and certified
VDE, IEC/EN61215, IEC/EN61730
Safety class II, CE, UKCA, MCS
Fire rating class C

Robust product design
PID resistance test passed
Salt mist test passed (IEC61701)
Ammonia test passed (IEC62716)
Dust and sand test passed (IEC60068)

Your solar partner for life

60 YEARS 60 years of solar expertise

Local support team in Europe

25 YEARS Linear power output guarantee

50 MIL 50 million PV modules installed

15* YEARS Product guarantee
not on roof

25* YEARS Product guarantee
on roof

Energy Solutions

SHARP
Be Original.

* Applicable for modules installed within the EU and additional listed countries.
Please check the guarantee conditions for your area before purchasing.

Electrical data (STC)

		NU-JD545	NU-JD550	
Maximum power	P_{max}	545	550	W_p
Open-circuit voltage	V_{oc}	50.54	50.70	V
Short-circuit current	I_{sc}	13.73	13.81	A
Voltage at point of maximum power	V_{mpp}	41.83	42.02	V
Current at point of maximum power	I_{mpp}	13.03	13.09	A
Module efficiency	η_m	21.1	21.3	%

STC = Standard Test Conditions: irradiance 1,000 W/m², AM 1.5, cell temperature 25 °C.
Rated electrical characteristics are within ±10 % of the indicated values of I_{SC}, V_{OC} and 0 to +5 % of P_{max}.
Reduction of efficiency from an irradiance change of 1,000 W/m² to 200 W/m² (T_{module} = 25 °C) is less than 3 %.

Electrical data (NMOT)

		NU-JD545	NU-JD550	
Maximum power	P_{max}	408.72	412.46	W_p
Open-circuit voltage	V_{oc}	47.90	48.05	V
Short-circuit current	I_{sc}	11.13	11.20	A
Voltage at point of maximum power	V_{mpp}	39.00	39.17	V
Current at point of maximum power	I_{mpp}	10.48	10.53	A

NMOT = Nominal Module Operating Temperature: 42.5 °C, irradiance 800 W/m², air temperature of 20 °C, wind speed of 1 m/s.

Mechanical data

Length	2,278 mm
Width	1,134 mm
Depth	35 mm
Weight	27.5 kg

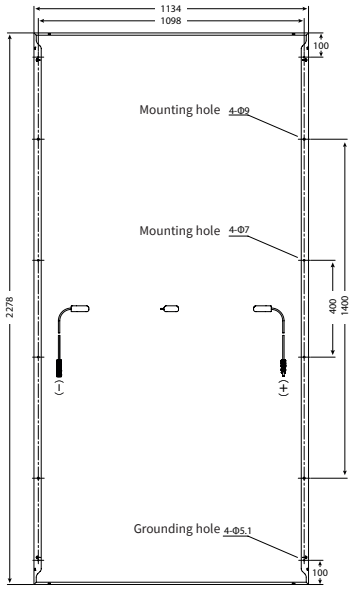
Temperature coefficient

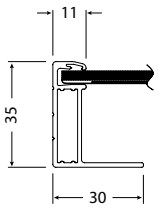
P_{max}	-0.341 %/°C
V_{oc}	-0.262 %/°C
I_{sc}	0.054 %/°C

Limit values

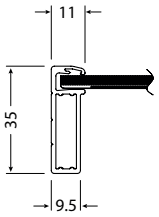
Maximum system voltage	1,500 V DC
Over-current protection	25 A
Temperature range	-40 to 85 °C
Max. mechanical load (snow/wind)	2,400 Pa
Tested snow load (IEC61215 test pass*)	5,400 Pa

Dimensions (mm)





Frame long side cross section



Frame short side cross section

*Please refer to SHARP's installation manual for details.

Packaging data**

Modules per pallet	31 pcs
Pallet size (L × W × H)	2.31 m × 1.13 m × 1.25 m
Pallet weight	Approx. 945 kg

**Special offloading requirements, please refer to QR code or: www.sharp.eu/nujd-offloading

General data

Cells	Half-cut cell mono, 182 mm x 91 mm, MBB, 2 strings of 72 cells in series
Front glass	Anti-reflective high transmissive low iron semi-tempered glass, 3.2 mm
Backsheet	White
Frame	Anodized aluminium alloy, silver
Cable	ø 4.0 mm², length 1,750 mm [or on request (+) 397 mm, (-) 50 mm]
Connection box	IP68 rating, 3 bypass diodes
Connector	C1, IP68

Note: Technical data is subject to change without prior notice. Before using SHARP products, please request the latest data sheets from SHARP. SHARP accepts no responsibility for damage to devices which have been equipped with SHARP products on the basis of unverified information. The specifications may deviate slightly and are not guaranteed. Installation and operating instructions are to be found in the corresponding handbooks, or can be downloaded from www.sharp.eu. This module should not be directly connected to a load.

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